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#### **DETAILED ACTION**

This a Supplemental Action, that restarts Applicant's response period, to the RCE filed by Applicant on 09/30/2008. Applicant contacted the Examiner to indicate that the previous Office Action mailed on 12/26/2008 did not fully respond to all the arguments made by Applicant. The Examiner agreed to issue a new Office Action more fully responding to the arguments presented in the filing on 09/30/2008 and restart Applicant's response period. The new Office Action with a full response to Applicant's arguments is presented below.

#### Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/30/2008 has been entered.

#### Status of the Claims

Claim 1 is amended and claims 4 and 9-28 are cancelled. Therefore, claims 1-3, 5-8, and 29 are currently pending examination for patentability.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-3, 5-8 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tetsuo et al. (European Patent Application EP 1065234 A2, Published 03/01/2001) in view of Nomura et al. (UK Patent Application 2138845 A, Published 10/31/1984).

## **Applicant Claims**

Applicant claims a composition comprising an organopolysiloxane and an aminomodified silicones. Applicant further claims a method of conditioning hair by applying the composition to the hair.

## Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

Tetsuo et al. teaches, "Cosmetic material containing powders treated with silicones, with silicones being represented by the following formula (1):

$$R_{a}^{1} R_{b}^{2} R_{c}^{3} SiO_{(4-a-b-c)/2} (1)$$

wherein the R<sup>1</sup> groups, which are the same or different, each represent an organic group selected from the class consisting of alkyl groups containing 1 to 30 carbon atoms, aryl groups, aralkyl groups, fluorinated alkyl groups and organic groups represented by the following formula (2); R<sup>2</sup> groups each represent a reactive substituent selected from the class consisting of a hydrogen atom, hydroxyl group and alkoxyl groups containing 1 to 6 carbons atoms, which is attached to a

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silicon atom in the siloxane chain directly or via a linkage group comprising at least one carbon, oxygen or silicon atom; R<sup>3</sup> groups each represent a silicone compound residue represented by the following formula (3); a is a number of from 1.0 to 2.5; b is a number of from 0.001 to 1.5; and c is a number of from 0.001 to 1.5

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$$-C_dH_{2d}$$
-O-(  $C_2H_4O$ )<sub>e</sub> (  $C_3H_6O$ )<sub>f</sub>  $R^4$  (2)

$$-C_xH_{2x}$$
- $(SiO)_y(R^1)(R^1)-SiR^1_3(3)$ 

wherein R<sup>4</sup> is a hydrocarbon group containing 4 to 30 carbon atoms or an organic group represented by R<sup>5</sup>-(CO)-; R<sup>5</sup> is a hydrocarbon group containing 1 to 30 carbon atoms; d is an integer of from 0 to 15, e is an integer of from 0 to 50, and f is an integer of from 0 to 50; and x is an integer of from 1 to 5, and y is an integer of from 0 to 500." (See abstract). The cosmetic material can come if any of the forms including liquid, emulsion, solid, paste, gel and spray forms. (See page 9, Lines 9-10). "When the present silicone compounds represented by formula (1) are used as a powder surface-treating agent, the weight average molecular weight suitable therefor, though it has no particular limits, is from 300 to 100, 000." (See page 4, Lines 30-31). In a specific example a compound organosiloxane is formed for use in a cosmetic composition that has an  $R^{***} = C_3H_6O(C_3H_6O)_3C_{18}H_{35}$  (see example 4),  $R^{**} = C_2H_4(CH_3)_2SiO(SiO)_7(CH_3)$  $(CH_3)Si(CH_3)_3$ ,  $R^* = C_2H_4Si(OEt)_3$  (See example 1). (See page 10, paragraph 0077 and page 11, formula 12). "A surface treated powder, having the surface treated by using silicones according" to the description in the abstract. (See page 23, claim 2). "A cosmetic material in which powders are mixed, at least one of said powders being a surface-treated powder according to any of claims 2 to 7. (See page 23, claim 8). "A cosmetic according to claim 8, further containing uncutuous agents as a constituent." (See page 23, claim 9). "A cosmetic material according to

claim 9, wherein at least a part of the uncutuous agents are fats and oils in a liquid state at room temperature." (See page 23, claim 10). "A cosmetic according to claims 9, 10, 11, wherein at least one of the uncutuous agents is an oil having fluorine-containing groups or amino groups." (See page 23, claim 12). Additional unctuous agents that can be used in the cosmetic material includes cylcosiloxane solutions of silicone rubber. (See page 6, paragraph 39). "A cosmetic material according to any of claims 8 to 17, further containing water as a constituent." (See page 23, claim 18). "A cosmetic material according to any of claims 8 to 18, further containing as a constituent a compound having an alcoholic hydroxyl group in its molecular structure." (See page 23 and 24, claim 19). "A cosmetic material according to claim 19, wherein the compound having an alcoholic hydroxyl group in its molecular structure is a water-soluble polymer." (See page 24, claim 21). A cosmetic material according to any of claims 8 to 21, further containing cross-linked organopolysiloxanes as a constituent." (See page 24, claim 22). "A cosmetic material according to claim 22, wherein the cross-linked organopolysiloxanes are cross-linked organopolysiloxanes which cause swelling when they contain a silicone having low viscosities of from 0.65 to 10.0 mm<sup>2</sup>/sec at 25°C in a quantity larger than their self weight." (See page 24, claim 23). "A cosmetic material according to claims 22 or 23, wherein the cross-linked organosiloxanes having cross-linked structure formed by the reaction between the hydrogen atoms bonded directly to silicon atoms and a cross-linking agent having at least two vinylic reactive moieties per molecule." (See page 24, claim 24). "A cosmetic material according to any of claims 8 to 25, further containing silicone resin as a constituent." (See page 24, claim 26). "A cosmetic according to claim 26, wherein the silicone resin is a silicone compound having a network structure." (See page 24, claim 29). "A cosmetic material according claim 29, wherein

silicone compound having a network structure is netted silicone compound containing at least one moiety selected from the group consisting of pyrrolidone, long-chain alkyl, polyoxyalkylene, fluroalkyl and amino moieties." (See page 24, claim 30). "A cosmetic according to claim 26, wherein the silicone resin is an acrylsilicone resin." (See page 24, claim 27). "A cosmetic according to claim 27, wherein the acrylsilicone resin is an acrysilicone containing at least one moiety selected from the group consisting of pyrrolidone, long-chain alkyl, polyoxyalkylene, fluoroalkyl and amino moieties." (See page 24, claims 28). "A cosmetic material according to any of claims 22 to 24, wherein the cross-linked organopolysiloxanes are organopolysiloxanes having their cross-links at least one kind of moiety selected from the family consisting of polyoxyalkylene, alkyl, alkyenyl, aryl anf fluoroakyl moieties." (See page 24, claim 25)." A cosmetic material according to claims 8 to 12, further containing a surfactant constituent." (See page 23, claim 13). "A cosmetic according to claim 13, wherein the surfactant is modified silicone having polyoxyalkylene chains." (See page 23, claim 14). A cosmetic material according to claims 8 to 15, further containing another powder, a coloring material or a mixture thereof." (See page 23, claim 16). "A cosmetic material according to claim 16, wherein at least a part of the powder, the coloring material or the mixture thereof is a silicone resin powder, a powder having a silicone elastomer as its skeleton, an organic powder containing constitutional repeating units represented by -[O-Si]<sub>n</sub>- or a mixture of two or more thereof." (See page 23, claim 17). The composition can further comprise organic solvents. (See page 5, paragraph 0036). In example 12 a liquid emulsion composition is described comprising diemthylpolysiloxane, methylphenylpolysiloxane, organopolysiloxane modified with polyoxyalkylene and alky groups, purified water, etc. (See page 17, paragraph 0117). In example 16 a cream composition is

describe comprising decamethylcyclopentasiloxane (cyclic siloxane), dimethylpolysiloxane, polyether-modified silicone, purified water, etc. (See page 20, paragraph 0129). "The term 'cosmetic material' as used herein are intended to include skin care ... and hairdressing products, such as shampoo, rinse and treatment." (See page 9, Lines 6-9). It is the examiner position that water is a component that is "suitable for application to hair" and therefore meets the limitation of "at least one additional ingredient suitable for application to hair".

# Ascertainment of the Difference Between Scope the Prior Art and the Claims (MPEP §2141.012)

Tetsuo does not exemplify hair treatment applications. Tetsuo also teaches that such compositions can in addition to having use as skin cosmetics can also be used in hairdressing applications such as shampoo.

Tetsuo lacks a teaching of a method wherein the organopolysiloxane hair treatment composition is applied after a composition comprising an amino-modified silicone. The teaching of Nomura et al. cures this deficiency.

Nomura et al. teaches a hair dye composition containing amino-modified silicone,. (See abstract). Amino-modified silicones represented by formula I. (See abstract). The hair dye treatment is applied for 30 minutes and then thoroughly washed with a secondary composition and water. (See page 6, Lines 15-20).

## Finding of Prima Facie Obviousness Rational and Motivation (MPEP §2142-2143)

It would have also been obvious to one of ordinary skill in the art at the time of the instant invention to use the composition taught by Tetsuo et al. in hairdressing applications such as shampoo. One would have been motivated to do so because if one wanted a composition to be

applied to the hair which has excellent storage stability in an emulsified condition (See page 2, paragraph 0009) one would have used the composition taught by Tetsuo et al. It would have been obvious to one of ordinary skill in the art to combine the teachings of Tetsuo with Nomura et al. One would have been motivated to do so because Nomura et al. teaches that after the application of the bleaching and dyeing composition the hair should be washed. For the foregoing reasons the instant invention would have been obvious to one of ordinary skill in the art at the time of the instant invention.

## Response to Applicant's Arguments

Applicant has argued that Tetsuo et al. do not teach a silicone not altered by a surface treatment step, i.e. a free organopolsiloxane. Applicant's argument has been fully considered but found not to be persuasive. In response to Applicant's argument it should be noted that the limitations on which applicant relies (i.e. free organopolysiloxane) are not stated in the claims. That is Applicant's claim are not limited to free organopolysiloxanes but can include organopolysiloxanes that are adhered to the surface of a powder. Therefore, Tetsuo et al. reads on the limitations of the instant claims.

Furthermore, Applicants' assert that the limitation of the organic polysiloxane being in solution or dispersion distinguishes the instant claim from the prior art since a bonded organopolysiloxane to a powder can not be in solution or dispersion. However, it is the Examiners position that Tetsuo et al. teach that the organopolysiloxane bonded to a powder is in fact placed in solution or dispersion for purposes of being used as a shampoo.

Applicant further argues that the Affidavit of unexpected results submitted on 09/02/2008 also distinguishes the instant claims from the prior art. Applicant's argument has been fully

considered but found not to be persuasive. Applicant's declaration comparing the product of the prior art reference with Applicant's product states subjective data, such as, ease of combing hair and feel of hair. Such subjective data is not persuasive of unexpected results.

Applicant finally argues that there is no motivation to combine the teachings of Tetsuo et al. with Nomura et al. since one is directed to cosmetics in general and other is directed to hair dye compositions. Applicant's argument has been considered but found not to be persusive.

Nomura et al. teaches that after a 30 minute application of combined first and second lotion the hair is sufficiently washed with a composition comprising SDS and then with water. Tetsuo et al. teach that cosmetic compositions having powders with silicone surface treatment may have surfactants such as SDS, and used as hairdressing products such as shampoo, rinse, and treatment. Therefore, one would have been motivated to use the shampoo composition of Tetsuo et al. for washing the hair after the hair dye treatment. Therefore, the rejection of claims 1-3, 5-8 and 29 Under 25 U.S.C. 103(a) as being unpatentable over Tetsuo et al. (EP Application 1065234 A2, Published 03/01/2001) in view of Nomura et al. (UK Patent Application 2138845 A, Published 10/31/1084) is maintained.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ali Soroush whose telephone number is (571) 272-9925. The examiner can normally be reached on Monday through Thursday 8:30am to 5:00pm E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Johann Richter can be reached on (571) 272-0646. The fax phone number for the

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organization where this application or proceeding is assigned is 571-273-8300. Information

regarding the status of an application may be obtained from the Patent Application Information

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Ali Soroush Patent Examiner Art Unit: 1616

/Johann R. Richter/

Supervisory Patent Examiner, Art Unit 1616